

1
2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Yasuhiro KOBAYASHI et al.

Attorney Docket Number: 103213-00103

Serial Number: NEW PATENT APPLICATION

Filed: December 23, 2004

For: ACTIVE MATRIX TYPE LIQUID CRYSTAL DISPLAY DEVICE

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
 P.O. Box 1450
 Alexandria, VA 22313-1450

Date: December 23, 2004

Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the information items listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each item is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the items be made of record therein and appear among the "References Cited" on any patent to issue therefrom.


- ☒ 1. This Information Disclosure Statement is being filed (a) within three months of the U.S. filing date, OR (b) before the mailing date of a first Office Action on the merits in the present application, OR (c) accompanies a Request for Continued Examination. No certification or fee is required.
- ☐ 2. This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection or Notice of Allowance.
 - ☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1).
 - ☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).
 - ☐ c. Check number _____ in the amount of \$180.00 in payment of the fee under 37 CFR §1.17(p). Please charge any fee deficiency or credit any overpayment to Deposit Account Number 01-2300 as needed to ensure

consideration of the disclosed information.

- ☐ 3. This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. Applicants hereby petition that the Information Disclosure Statement be considered. Attached is our check number in the amount of \$180.00 in payment of the petition fee under 37 CFR §1.17(i)(1). Please charge any fee deficiency or credit any overpayment to Deposit Account Number 01-2300 as needed to ensure consideration of the disclosed information.
- ☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1).
- ☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).
- ☒ 4. Two of the references were cited in counterpart foreign application PCT/JP03/16832, filed December 25, 2003. The International Search Report is attached for the Examiner's information.

Japanese Patent Publication Number 6-3647, dated January 14, 1994, discloses an active matrix type liquid crystal display device composed of liquid crystal pixels arrayed in a matrix and pixel transistors for driving the individual liquid crystal pixels. Here, immediately before the transition from the selection period to the nonselection period, the voltage level applied to the gate electrode is first lowered to a second high-level gate voltage that is lower than a first high-level gate voltage, and is then made to fall further to a low-level gate voltage to produce a gate pulse. In this way, the voltage shift in the image signal written to each liquid crystal pixel can be reduced.

Respectfully submitted,



Charles M. Marmelstein
 Registration Number 25,895

Customer Number 004372
 ARENT FOX PLLC
 1050 Connecticut Avenue, NW
 Suite 400
 Washington, DC 20036-5339
 Telephone: (202) 857-6000
 Fax: (202) 638-4810

CMM:vmh

Enclosures: Form PTO-1449
 International Search Report
 References (3)

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY DOCKET NUMBER 103213-00103	NEW PATENT APPLICATION APPLICANT Yasuhiro KOBAYASHI et al. FILING DATE December 23, 2004
LIST OF REFERENCES CITED BY APPLICANT <i>(Use several sheets if necessary)</i>		GROUP ART UNIT

U.S. PATENT DOCUMENTS

EXAMINER INITIALS	AA	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION		
							YES	NO	PART.
	AG	2-74989	March 14, 1990	Japan				X	
	AH	6-3647	January 14, 1994	Japan					X
	AI	9-101502	April 15, 1997	Japan				X	
	AJ								
	AK								
	AL								

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	AM	
	AN	
	AO	

EXAMINER	DATE CONSIDERED
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	